Amendments to the Specification:

Please replace the paragraph at Page 2, lines 2-13 with the following amended paragraph:

In the scale device 100, the scale member 101 is formed from a long plate of glass, for example, and has position signals provided longitudinally on one of the main sides thereof, which will not be described in detail herein. On the other hand, the case member 102 is formed from an aluminum alloy to have a generally U-shaped section, and somewhat longer than the scale member 101, for example. The case member 102 has the scale member 101 fixed inside it by bonding. The scale member 101 is fixed to the case member 102 by bonding with an elastically deformable silicone adhesive, for example. Thus the scale member 101 is protected. The scale device 100 has a mounting hole 105 formed in each of longitudinal end portions of the case member 102. With a mounting screw (not shown) driven in each mounting hole 105, the scale unit 103 is fixed to a first part of a machine on which the scale device 100 is to be used, for example, a stationary part.

Please replace the paragraph at Page 2, line 14 - Page 3, line 1 with the following amended paragraph:

In the above scale device 100, the sensor unit 104 is built in the scale member 101. The sensor unit 104 has a bearing mechanism provided on a slider. The slider has a substrate having a sensor mounted thereon, which is not illustrated and described herein. The bearing mechanism enables the slider to be freely slid longitudinally by the scale member 101 as a guide. The sensor unit 104 has provided thereon a coupling unit which is not described in detail herein. The coupling unit is ~~penetrated through~~ held within a longitudinal guide opening 106 formed in the case member 102 ~~oppositely to~~ opposing the scale member 101. The coupling unit ~~is led~~ extends out for integration with a mounting unit 107 provided thereon to form a detector unit 108.

Please replace the paragraph at Page 6, lines 3-19 with the following amended paragraph:

According to the present invention, there is provided a scale device composed of a scale unit including a scale member and case member, and a detector including a sensor. The scale member is formed from a long plate-like material and has position signals provided thereon. It

has at least a pair of fixing holes formed across an area carrying the position signals. The fixing holes are spaced longitudinally from each other. The case member has the scale member housed and fixed therein, and has formed therein at least a pair of fixing holes spaced longitudinally from each other and through which there are ~~penetrated~~ inserted fastening members to be screwed into mounting holes formed ~~inn~~ in a first part of a machine on which the scale device is to be used. The detector is mounted on a second part, moving in relation to the first part, of the machine, in which condition the sensor is positioned opposite to the position signal carrying area on the scale member. When the scale unit is mounted on the mounting portion of ~~on~~ the first part of the machine with the case member placed between them, the fastening member is ~~penetrated~~ inserted through the fixing holes in the scale member and case member and then screwed into the mounting hole formed in the first part of the machine, whereby the scale member is fixed along with the case member to the first part of the machine.

Please replace the paragraph at Page 12, line 17 - Page 13, line 6 with the following amended paragraph:

Note that the fixing hole 12 may be an opening through which there is ~~penetrated~~ inserted a thread portion 13a of a mounting screw 13 which is used for fixing the scale member 6 and first case member 7 to the stationary part 2 of the machine, and around which a head portion 13b of the screw 13 is engaged. Therefore, the opening may be a circularly or appropriately otherwise-shaped hole or a cut, for example. Alternatively, one of the fixing holes 12 may be circular while the other may be a cut or they may be elongated holes whose longitudinal directions are different from each other. In case the scale device 1 is long and fixed at a plurality of places with the mounting screw 13 driven in each of a plurality of mounting holes formed in the stationary part 2 of the machine, a corresponding plurality of fixing holes 12 may be formed in the scale member 6 ~~oppositely to~~ opposing the mounting holes, respectively.

Please replace the paragraph at Page 14, lines 1-12 with the following amended paragraph:

The first case member 7 is secured at the first lateral portion 7b thereof to the stationary part 2 of the machine. In the first fixing portion of the first lateral portion 7b, there are formed fixing holes 15A and 15B (will generically be called "fixing hole 15" hereunder wherever they may not be referred to individually) ~~oppositely to~~ opposing the mounting holes 10 formed a

predetermined space away from each other in the stationary part 2 of the machine. As will further be described later, the fixing hole 15 is [[a]] one through which the thread portion 13a of the mounting screw 13 is to be ~~penetrated~~ inserted when fixing the scale portion 4 to the stationary part 2 of the machine. With the scale member 6 being fixed, by bonding, to the first case member 7, the fixing hole 15 is coaxial, and communicates, with the aforementioned fixing hole 12. The fixing hole 15 has an inside diameter smaller than the outside diameter of the head portion 13b of the mounting screw 13.

Please replace the paragraph at Page 15, lines 10-17 with the following amended paragraph:

One of the second case members, 8A, has formed therein a guide hole 17 corresponding, and near equal in diameter, to the fixing hole 15 in the first case member 7 as shown in FIG. 4. The thread portion 13a of the mounting screw 13 is ~~penetrated~~ inserted through the guide hole 17 when installing the scale member 4 to the stationary part 2 of the machine. Also, the other second case member 8B has formed therein a guide hole 18 corresponding, and nearly equal in diameter, to the guide hole 16 in the first case member 7. The thread portion 13b of the mounting screw 13 is ~~penetrated~~ inserted through the guide hole 18.

Please replace the paragraph at Page 16, lines 7-13 with the following amended paragraph:

The side case member 9 has formed through the spacer portion 20 thereof a guide hole 21 which is to be placed coaxially with the fixing hole 15 and guide hole 16 formed in the first case member 7 when the side case 9 is fitted in the first case member 7 as will further be described later. The guide hole 21 has an inside diameter larger than the outside diameter of the thread portion 13b of the mounting screw 13 and thus permits the mounting screw [[14]] 13 to ~~penetrate~~ extend through the guide hole 21 when the scale unit 4 is installed to the stationary part 2 of the machine.

Please replace the paragraph at Page 18, line 13 - Page 19, line 2 with the following amended paragraph:

As shown in FIG. 4, the scale unit 4 is installed, at the first lateral portion 7b of the first case member 7, to the stationary part 2 of the machine with the mounting screw 13. When

installing the scale unit 4 to the stationary part 2 of the machine, the first case member 7 is applied to the stationary part 2 with the mounting bore 10 in the stationary part 2 being placed for alignment with the corresponding fixing hole 15 in the first case member 7. Then, the mounting screw 13 is introduced from the guide hole 16 in the second lateral portion 7c of the first case member 7. With the thread portion 13a of the mounting screw 13 being ~~penetrated~~ inserted through the fixing hole 12 in the scale member 6, fixing hole 15 in the first case member 7 and guide hole 17 in the second case member 8, and then driven into the mounting bore 10 in the stationary part 2 of the machine, the scale unit 4 is fixed to the stationary part 2 of the machine.

Please replace the paragraph at Page 24, lines 6-16 with the following amended paragraph:

The spacer member 36 is formed from a stainless steel sheet, for example. It is shaped as a rectangular piece having nearly the same thickness as the layer thickness of the adhesive 14 and of which each side has a length somewhat smaller than the width of the scale member 6. The spacer member 36 has formed therein a fixing hole 37 whose diameter is the same as that of the fixing hole 12 formed in the scale member 6 and which is open at the circumferential bottom thereof. Namely, the fixing hole 37 is semicircular as shown in FIG. 8. It should be noted that the fixing hole 37 may be larger in diameter than the fixing hole 12 so long as it is an opening through which the thread portion 13a of the mounting screw 13 can be ~~penetrated~~ inserted, and it may also be a hole having any other shape, circular or appropriately otherwise-shaped, or a cut, correspondingly to the shaped of the fixing hole 12, for example.

Please replace the paragraph at Page 24, line 17 - Page 25, line 4 with the following amended paragraph:

In the scale device 35, the spacer member 36 is interposed between the second main side 6b of the scale member 6 and the inner surface of the first lateral portion 7b of the first case member 7 with the fixing hole 37 being axially aligned with the fixing holes 12 and 15 as shown in FIGS. 6 and 7. The mounting screw 13 is introduced from the guide hole 16 in the first case member 7, and has the thread portion 13a thereof ~~penetrated~~ inserted through the fixing hole 12 in the scale member 6, fixing hole 37 in the spacer member 36, fixing hole 15 in the first case member 7 and guide hole 17 in the second case member 8 in this order, and then driven into the mounting bore 10 in the stationary part 2 of the machine.

Please replace the paragraph at Page 25, lines 14-18 with the following amended paragraph:

In the scale device 35, the plate-shaped spacer member 36 is interposed between the scale member 6 and first case member 7. However, if the spacer member 36 is not in place during installation, the fixing holes 12 and 15 will not possibly be ~~alined~~ aligned with the fixing hole 37. In such an event, the mounting screw 13 cannot be ~~penetrated~~ inserted through these holes and the spacer member 36 has to be repositioned.

Please replace the paragraph at Page 27, lines 9-20 with the following amended paragraph:

In the scale device 40, the mounting screw 13 is introduced from the guide hole 16 in the first case member 7, and has the thread portion 13a thereof ~~penetrated~~ extending through the fixing hole 12 in the scale member 6, fixing hole 42 in the spacer member 41, fixing hole 15 in the first case member 7 and the guide hole 17 in the second case member 8 and then driven into the mounting bore 10 in the stationary part 2 of the machine. By tightening the mounting screw 13 with the spacer member 41 being interposed between the scale member 6 and first case member 7, the second case member 8, first case member 7 and scale member 6 are fastened together and fixed to the stationary part 2 of the machine. Thus, since the mounting screw 10 is tightened with absorption, by the interposed spacer member 41, of any spacing, caused by the layer thickness of the adhesive 14, between the scale member 6 and first case member 7, the scale member 6 can be prevented from being deflected.

Please replace the paragraph at Page 28, lines 8-21 with the following amended paragraph:

The scale member 46 is also formed from an aluminum alloy for extrusion, for example. It is a rectangular plate somewhat longer than the distance between scale mounting portions provided a predetermined distance between them on the stationary part 2 of the machine. The scale member 46 has the position signal carrying area 11 (equivalent to that in the scale device 1) provided on the first main side 46a thereof. Also, the scale member 46 has longitudinal ~~opposite~~ opposing end portions thereof, across the position signal carrying area 11, as mounting portions, and it is fixed at the mounting portions to the stationary part 2 of the machine along with the first case member 7. A fixing hole 47 is formed in each of the mounting portions. As shown in FIG. 12, the fixing hole 47 is also open at the circumferential bottom thereof, namely, it is

semicircular. The fixing hole 47 is to be opposite to the mounting bore 10 in the mounting portion of the stationary part 2 of the machine. It should be noted that the fixing hole 47 may also be [[a]] circular or any appropriately otherwise-shaped hole or a cut.

Please replace the paragraph at Page 29, lines 1-9 with the following amended paragraph:

As shown in FIG. 11, the scale member 46 is fixed at the second main side 46b thereof opposite to a first main side 46a to the inner surface of the first case member 7 by bonding with the adhesive 14. The scale member 46 has first and second, ~~opposite~~ opposing rib-shaped projections 48 and 49 formed integrally on the second main side 46b thereof along longitudinal opposite edges and full length as shown in FIG. 12. The first and second rib-shaped projections 48 and 49 are formed integrally on the second main side 46b during extrusion molding of the scale member 46. They have a predetermined heigh h which defines the layer thickness of the adhesive 14 applied to the scale member 46.

Please replace the paragraph at Page 29, line 18 - Page 30, line 5 with the following amended paragraph:

In the scale device 45 constructed as above, the scale member 46 and first case member 7 are bonded at the entire ~~opposite~~ adjacent surfaces thereof to each other with the adhesive 14 having a uniform layer thickness. So, the thermal stress between the scale member 46 and first case member 7, caused by ambient environmental conditions, will be uniform over their ~~opposite~~ adjacent surfaces. Therefore, in the scale device 45, since partial strain of the adhesive 14, caused by a thermal stress due to nonuniform layer thickness, can be suppressed, the scale member 46 fastened at opposite end portions thereof to the first case member 7 can be fixed, by bonding, along the full length thereof with a high precision.

Please replace the paragraph at Page 30, lines 6-14 with the following amended paragraph:

Also in the scale device 45, since the scale member 46 is bonded to the inner surface of the first case member 7 with the first and second rib-shaped projections 48 and 49 being in contact with the inner surface, the bonding can be made with an improved precision as compared with that in the structure in which the scale member is bonded at the entire surface thereof to the

first case member. Also, since the first and second rib-shaped projections 48 and 49 are formed along the ~~opposite~~ opposing longitudinal edges of the second main side 46b of the scale member 46, the scale member 46 can precisely be bonded to the first case member 7 with limitation of the inclination thereof in the width direction.

Please replace the paragraph at Page 30, line 15 - Page 31, line 6 with the following amended paragraph:

Note that although in the scale device 45, the first and second rib-shaped projections 48 and 49 are formed along the longitudinal ~~opposite~~ opposing edges on the second main side 46b of the scale member 46, the present invention is not limited to such a structure. In the scale member 46, each of the first and second rib-shaped projections 48 and 49 may be formed from a plurality of convexities, for example. Also in the scale member 46, a third rib-shaped projection 50, indicated with a dot-dashed line in FIG. 12, may be formed integrally on the second main side 46b of the scale member 46 in addition to the first and second rib-shaped projections 48 and 49. Also, the third rib-shaped projection 50 may be so formed instead of the first and second rib-shaped projections 48 and 49. The third rib-shaped projection 50, formed ~~opposite~~ adjacent to the position signal carrying area 11, will improve the mechanical strength of the position signal carrying area 11 which will thus be prevented from being deflected or otherwise influenced.

Please replace the paragraph at Page 32, line 21 - Page 33, line 11 with the following amended paragraph:

In the scale device 55, the washer member 56 is applied to the first main side 6a of the scale member 6 at the bottom of the guide hole 21 in the side case member 9 with the side case member 9 being assembled to the first case member 7. At this time, the washer member 56 has the fixing hole 57 axially aligned with the fixing hole 15 and guide hole 16 in the first case member 7 and fixing hole 12 in the scale member 6 as shown in FIGS. 13 and 14. The mounting screw 13 introduced from the guide hole 16 in the first case member 7 has the thread portion 13a thereof ~~penetrated~~ inserted through the fixing hole 57 in the washer member 56. With the thread portion 13a of the mounting screw 13 being ~~penetrated~~ inserted through the fixing hole 57 in the washer member 56, fixing hole 12 in the scale member 6 and fixing hole 15 in the first case

member 7 and then driven into the mounting bore 10 in the stationary part 2 of the machine, the washer member 56, scale member 6 and first case member 7 are fastened together.

Please replace the paragraph at Page 33, line 12 - Page 34, line 1 with the following amended paragraph:

In the scale member 55, since the washer member 56 is interposed between the scale member 6 and the head portion 13b of the mounting screw 13, the running torque from the mounting screw 13 will act on the washer member 56. Since the load from the mounting screw 13 to the scale member 6 acts in the direction in which the scale member 6 is forced to the first case member 7, the scale member 6 is prevented from being deflected or otherwise influenced. Since the outside diameter of the washer member 56 is larger than that of the guide hole 16 formed in the first case member 7, through which the mounting screw 13 is ~~penetrated~~ inserted, the washer member 56 is prevented from falling down from the guide hole 16 during installation of the scale device 55 to the machine. Namely, the scale device 55 can be installed to the machine with an improved efficiency.

Please replace the paragraph at Page 34, line 11 - Page 35, line 1 with the following amended paragraph:

As shown in FIG. 16, the scale member 6 has first calking hole 62 formed between the fixing hole 12 and position signal carrying area 11. In the scale member 6, there are formed the first calking holes 62 in pair across the position signal carrying area 11, but a calking hole 62 may be provided only at any side of the position signal carrying area 11. Also, a second calking hole 63 is formed along with the fixing hole 15 in the first lateral portion 7b of the first scale member 7 ~~oppositely~~ adjacent to the first calking hole 62 in the scale member 6. The distance between the second calking hole 63 and fixing hole 15 in the first case member 7 is almost equal to that between the fixing hole 12 in the scale member 6 and first calking hole 62 in the scale member 6. Thus, the first and second calking holes 62 and 63 are in pair with each other. In addition, the first case member 7 has a large-diameter guide hole 64 formed in the second lateral portion 7c ~~oppositely~~ adjacent to the second calking hole 63.

Please replace the paragraph at Page 35, lines 2-10 with the following amended paragraph:

In the scale device 60, when the scale member 6 is bonded to the inner surface of the first case member 7 for the fixing hole 12 to communicate with the fixing hole 15, the first calking hole 62 in the scale member 6 will communicate with the second calking hole 63 in the first case member 7. With the knock-pin 61 introduced from the guide hole 64 in the first case member 7 into the first and second calking holes 62 and 63 which will thus communicate with each other, the scale member 6 will securely be fixed to the first case member 7 as shown in FIG. 15. It should be noted that in the scale device 60, the end face of the knock-pin 61 is made ~~the same side~~ even with the first main side 6a of the scale member 6 such that the sensor unit 25 can smoothly slide.

Please replace the Abstract at Page 41, lines 2-16 with the following amended paragraph:

In a scale device including a scale unit (4) and detector (5), the scale unit (4) includes a scale member (6) formed from a long material and having at least a pair of fixing holes (12) formed therein across a position signal carrying area (11) defined thereon and which carries ~~positions~~ position signals, and a case member (7) housing the scale member (6) therein and having formed therein a pair of fixing holes (15) through which there is ~~penetrated~~ inserted a fastening member (13) to be screwed into a mounting hole (10) formed in a stationary part (2) of a machine to which the scale device is to be installed. The detector (5) is fixed to a moving part (3) of the machine, which moves relative to the stationary part (2), and includes a sensor (29) which moves oppositely to the position signal carrying area (11) on the scale member (6). The scale unit (4) is fixed to the stationary part (2) with the scale member (6) and case member (7) being fastened together by the fastening member (13). Thus, the scale member (6) different in linear expansion coefficient from the stationary part (2) can be installed to the latter with a high precision, and the scale device can make a measurement with a high accuracy, independently of environmental conditions.